

tension to the right pleura and pericardium, with consequent clinical signs and symptoms. Icterus is not present in uncomplicated cases. The urine is decreased in amount, and albumin is commonly absent. The prognosis is eventually hopeless. The treatment is purely symptomatic. Unusual precaution should be taken against exposure to acute infections.—J. L. Y.

The Intestinal Origin of the So-called "Fever of Infancy" (Fiebre de Borrás).—DUENAS (*Revista medica Cubana*, January, 1903, No. 1) suggests the possible relation of this Cuban infantile fever with the summer diarrhoea of infants of the United States. The recent work of Duval and Bassett has shown that at least certain forms of summer diarrhoea of children are due to the bacillus dysenteriae of Shiga, as shown by the presence of this organism in the stools of such cases and the agglutination reactions on the organism with the blood of those ill of or convalescent from the disease.

In a case of the author's, a girl of twenty months, who had been suffering for several days with persistent bloody vomiting, pain in the epigastrium, and mucus and ill-smelling stools, a distinct fever and rapid pulse, the patient's blood twenty days after the beginning of the disease gave a positive reaction with the bacillus dysenteriae in dilutions of 1:60. This case the author further regards as significant of the possible relation of this bacillus with certain of the "black vomits" attended with fever and of unknown etiology.—F. P. G.

The Inheritance and Intra-uterine Transmission of the Agglutinating Properties of the Blood and the Formation of Agglutinins in the Bodies of Embryos.—JUREWITSCH (*Cent. f. Bac. u. Para.*, 1902, Bd. xxxiii, p. 76) states that the agglutinating properties of the blood of normal pregnant rabbits and guinea-pigs for typhoid bacilli was first determined. The blood of some normal rabbits possessed this power in 1:80 dilutions. The blood of the young from such mothers also had the power to agglutinate typhoid bacilli, but in less degree than the mothers. Occasionally in a litter from a single mother certain animals showed agglutinins in their blood, while others did not. With normal guinea-pigs neither the blood of mothers nor young showed any tendency to agglutinate typhoid bacilli. Normal pregnant guinea-pigs were now immunized against typhoid bacilli during the time of pregnancy, so that at the birth of the young agglutination took place with the mother's blood in 1:4000 or 1:5000 dilutions. In three out of thirty-one cases no agglutination could be demonstrated in the young. In all the other cases agglutination was obtained with the blood of the young, but was three to thirty times weaker than with the blood of the mothers, and after a short period the blood of the young lost this property entirely. In order to determine whether the agglutinins were simply transmitted through the placenta to the blood of the young, or whether the foetus was actually endowed with the power of producing agglutinins, the mothers were subjected to a passive immunity, and agglutinating sera from previously immunized guinea-pigs, rabbits, and horses were injected into the pregnant mothers. After a few hours Caesarean section was performed and the blood of the young tested. The result was the same as when the mothers were immunized during pregnancy. It was further found that the blood of young normal rabbits coming from a

normal mother whose blood agglutinated typhoid bacilli did not lose their agglutinating properties as they grew older, but, on the other hand, showed in some instances agglutination in higher dilutions than the mother's blood. The author believes these animals inherit the power of producing agglutinins. Guinea-pigs which had previously been immunized were allowed to become pregnant. The young of these animals showed the power of agglutinating typhoid bacilli often in much higher dilutions than the mothers.—W. T. L.

A Contribution to the Knowledge of the Pathological Changes Following Thyroid Extirpation in Rabbits.—BENSEN (*Virch. Arch.*, 1902, Bd. clxx. p. 229) states that the experiments may be divided into three groups: First, rabbits from which the thyroids had not been removed were fed upon thyroid extract; second, the thyroid gland was removed and no thyroid extract given; and, third, the thyroid gland was removed and animals then fed upon thyroid extract. In each series of experiments the animals were killed after a certain number of days and the thoracic and abdominal organs examined. In the first group the animals were killed after receiving 0.3 grain of thyroid extract twice daily for twenty-four days. Sections of the liver showed fatty infiltration and hyperæmia. Colloid droplets were found in the convoluted tubules of the kidney. The pathological changes were, however, not very marked in any organ. In the second group of experiments extensive degenerative changes were found in the kidneys, liver, and heart muscle. In animals that lived thirty to forty days after the operation the kidney tubules were filled with enormous amounts of colloid, sometimes appearing in long cylinders, and if life was prolonged from 100 to 150 days there was, besides the presence of colloid, such an extreme grade of degeneration of the kidney epithelium that even the nuclei were much affected. The liver and heart muscle showed the same general type of extreme cellular degeneration. In those animals living longest proliferative changes were noted in the kidney and liver. Infiltration of leucocytes sometimes occurred in the liver. The splenic changes consisted principally in hyperæmia and pigmentation. No alterations were observed in the stomach, pancreas, parotid gland, tongue, adrenal, and generative organs. In the third group of experiments changes similar to those first described were found, but in much less degree. The author concludes that when the thyroid glands of rabbits are extirpated a poison is either produced or withheld in the body which gives rise to a peculiar degeneration of the cells of the kidney, liver, and heart muscle. The product of this cell degeneration appears as colloid droplets or in the kidney tubules even as long colloid cylinders.—W. T. L.

The Relations Between the Lymphatics and the Connective Tissue.—W. G. MACCALLUM (*Johns Hopkins Hospital Bulletin*, 1903, vol. xiv. p. 1) says: By means of silver staining, v. Recklinghausen, in 1862, showed that the walls of the lymphatic capillaries are composed of a single definite layer of flat polygonal endothelial cells. He supposed, however, that the walls were incomplete and that the lymphatics were in direct communication with the intercellular spaces of the surrounding tissues. Hiss, Reichmann and others opposed the idea of the lymph canaliculi, and believed in the integrity of the lymph vessels. MacCallum has studied by means of injections, and silver stains the lymphatics of the skin of embryo pigs. In sections